SKANDINAVISKA BANKEN

AKTIEBOLAG

GÖTEBORG STOCKHOLM MALMÖ

QUARTERLY REVIEW

issued by

THE STATISTICAL DEPARTMENT

Vol. XXXIII No. 1 *January 1952*

CONTENTS:

Convertibility and the Strength of Nations.
By Per Jacobsson . . . . *Page 1*

New Influences on Commodity Markets.
By Heinz Heymann . . . . » 6

Import and Export Prices . . . . » *11*

Genetics and Vegetable Food Supplies.
By Ewert Åberg . . . . » *13*

The Economic Situation during the Fourth Quarter of 1951 . . . . » *20*

The reproduction of articles contained in this Quarterly is permitted provided the source is stated. All communications regarding the Quarterly should be addressed to Skandinaviska Banken AB., Stockholm 16 (Sweden).

SKANDINAVISKA BANKEN

AKTIEBOLAG

GÖTEBORG STOCKHOLM MALMÖ

Board of Directors

Chairman: M. Waldenström.

Deputy Chairmen: Åke Belfrage, E. C:son Herslow.

Other Directors: Hakon Leffler, Ernst Wehtje, Gösta Liedberg, E. Wijkander, A. Gabrielsson, Sven Schwartz, Tage Cervin, S. Malmberg, Dan-Axel Broström, J. Nordenfalk, K. R. Bökman.

Deputy Directors: Erik Lundh, Gustaf Söderlund, C. Lindskog, Ivar Åkerman, S. Hammarskiöld, F. Hartmann.

Managers

Göteborg

Erik Lundh *(Managing Director)*, E. Lundberg *(Deputy Managing Director)*, Nils Ljungdahl, Orvar Hansson, Nils Bökman, E. Holmberg.

Stockholm

Gustaf Söderlund *(Managing Director)*, P. Brundell *(Deputy Managing Director)*, F. Ahrén, Ivar Bergquist, Åke Bergqvist, E. Björkman, N. E. Ihre*, Gustaf Rabe, E. E. Eriksson, F. Fessé, B. Lindgren, S. G. Malmberg, Walter Markland, F. Marmolin, E. Ranefors.

---

* Also member of the managements in Göteborg and Malmö.

Malmö

C. Lindskog *(Managing Director)*, Th. Westerström *(Deputy Managing Director)*, Gösta Fries, John Ohlin, N. Herslow.

Editor of the Quarterly Review: Einar Huss, D. Sc.

CONVERTIBILITY AND THE STRENGTH OF NATIONS

BY PER JACOBSSON

Plutarch says in one of his lives of famous men: "He who first called money the sinews of the state seems to have said this with special reference to *war*". The oldest Greek text of which a record remains had in mind, however, as much the conditions of peace as those of war; the Greeks became at an early stage the foremost merchants of their time and, therefore, knew well the importance of a sound money for the daily business of life. Did not Athens manage to maintain throughout its most glorious period in the fourth and fifth centuries B. C. a stable currency which was respected all over the Mediterranean? The Romans, on the other hand, were more particularly preoccupied with the emergencies to which their expanding political domain was exposed, *i. e.* their thoughts became centred more on times of war. In either case, however, good money was an indispensable element of strength; and the same applies today.

Not long ago a well-known European politician explained to a *Swiss* audience that the countries of western Europe, having developed important manufacturing industries, had to guard very carefully their colonial sources of supply of raw materials, in so far as they did not possess natural resources of their own. The Swiss, with their high degree of industrial development, could not help being somewhat surprised, since they have neither deposits of raw materials within their own borders nor any colonies. But they possess a sound currency — the Swiss franc — backed by ample monetary reserves and therefore convertible into gold and dollars. Thus they are able to buy raw materials in the cheapest market accessible; moreover, the proportion of their current savings to the national income, viz. 16 per cent., ranks with that of the United States as the highest in the world, and the advantage of this is particularly clear at a time when so many countries are labouring under a disequilibrium between savings and investments, with adverse effects on their balance of payments and their currency position. One may well wonder what conditions would be like in this country of narrow valleys and not very fertile plains if Switzerland had not developed such a high rate of capital formation on the basis of a sound currency.

Before 1914 the Bank of *France* used to maintain the most ample gold reserves of any bank of issue in the whole world. The French franc had long been stable, having been fully convertible into gold since the year 1802, when Napoleon put an end to the monetary disorders of the revolutionary period. It is a remarkable fact that the franc kept its gold value notwithstanding the military disasters of 1814—15 and 1870—71, the revolutions of 1830 and 1848 and the strain to which it was subjeced by all the many ministerial crises of the Third Republic. The French as a people seem unable to get away from political instability; but they had monetary stability and since they are gifted and, moreover, of a saving disposition the country's strength was unimpaired — as was most clearly shown by the resistance offered in the 1914—18 war, when the enemy stood on French soil and France had to supply the main counterforce until substantial outside aid could arrive.

But between the two wars France was a prey to both political and monetary instability. That was too much for any nation and was one of the developments which led to the calamities of 1940.

Reading French history, it is difficult to avoid the conclusion that the French are a people of "frondeurs", inclined to indulge in controversies leading to political instability. But that makes it the more imperative for them to maintain a stable currency backed by ample reserves. At the moment the French people are suffering from loss of faith in their currency. Thus they are saving less than they otherwise would do, and this is the more dangerous now that there will be progressively less Marshall-aid counterpart funds available for civilian development.

Would it not be worth while — even at the cost of considerable sacrifices — to restore monetary confidence, and is not the same true for Great Britain? When Europe built up its world position in the course of the nineteenth century it was able to place at the disposal of other countries the international money market in London and the capital market in Paris, each based on the solid foundation of a stable convertible currency; it is difficult to see how Europe could regain its former strength unless these two markets are rehabilitated.

What has been, in the monetary sphere, the peculiar strength of Great Britain may perhaps best be seen from a comparison with other countries, it being remembered that for nations, as for individuals, elements of strength and weakness are strangely intertwined.

The *United States* has the advantage of rich natural resources and a vast internal market which lends itself to the technique of mass production and, in boom periods, affords an opportunity for a rapid advance in productivity and wealth. There is a corresponding weakness however: the body economic is so vast that in periods of depressions — as in the 1930s — human beings often stand helpless before the task of lifting it out of the trough of bad business and unemployment.

France, too, is rich in natural resources. Possessing a fertile soil, iron and coal deposits, forests, waterfalls and vineyards, it has achieved a nice balance between industry and agriculture. But the reverse of these advantages is that the natural wealth of the country may lead to complacency and to the idea that energy can well be spared for overindulgence in political controversies — which becomes dangerous when there is need for concentration on some national task, such as the restoration of currency stability.

Germany has a valuable area in the Ruhr. Apart from this the country is not particularly rich, but the German people are hard working and scientifically-minded — ready, for instance, to explore in a most painstaking manner all the mixtures likely (or even unlikely) to bring forth a new chemical product. Too much devotion to work leaves them little time to think, however, and this may prove dangerous, especially politically.

Great Britain has neither the rich natural resources and the wide domestic market of the United States, nor the well-balanced economy of France, nor the hard-working population of Germany; but with its fine geographical position it has been *the trader and banker of the world.* In contact with every land under the sun and able to obtain raw materials from most diverse sources, it developed a large variety of industries ready to serve the needs of people in all corners of the world. These industries needed the indication provided by free markets in order to know what they could best sell and therefore should produce; thus, from a production point of view also, convertibility was of importance.

It is true that great dependence on foreign trade has made the British economy sensitive to the effects of troubles in other countries — which has not always been agreeable; but it may be wondered where Great Britain could find another source of peculiar strength if it lost its position as trader and banker of the world. There can, however, be little doubt that a prolonged period of inconvertibility of sterling might expose that position to dangers which it would be difficult to confront. It is probable that the British people are again becoming aware of the loss they might suffer if they did not manage to inspire sufficient confidence in their currency for sterling to go on serving as a leading international currency.

Under a system of *non*-convertible currencies (even if these are backed up by most effective controls) there are *a number of dangers* which would seem to be well-nigh unavoidable.

(i) In the first place, it is to be noted that, behind the "protection" afforded by control, costs and prices tend to rise: at the present time some important forest products (in particular pulp and paper) are fetching 40 to 50 per cent. more in Europe than the prices quoted for the same products in the United States. There are also other examples; this was the way in which European prices rose in 1948—49: the outcome was devaluation. And, if the present trend continues, this progressive deterioration of the controlled currencies can only end in another devaluation.

(ii) Already the compulsion to buy elsewhere than in the cheapest markets, which is so often inherent in a system of restrictions, is tending to reduce the competitive power of the countries with exchange control. It should be added that without competition from other monetary areas European industries tend to become flabby.

(iii) There are, moreover, reasons for doubting that European currencies can continue to be keystones of large monetary areas such as the sterling area, the French and Belgian-franc areas, if they continue to be subject to a régime of exchange restrictions.

Not only in private but also in public, voices in overseas countries are being raised in criticism of the way in which European metropolitan countries manage their monetary affairs. In this, as in several other respects, the system of exchange control gives the countries which rely on control *a false sense of security* — how false may, for instance, be seen from the fact that the control manifestly cannot prevent very substantial movements of funds from one market to another. It is, further, apt to lead to the perpetuation of a mistaken attitude in that the representatives of the country maintaining the control regard it as their duty, and believe it to be in their country's interest, to defend the control in force, while in fact it would be much more sensible if they tried to give a helping hand in getting rid of it.

But the question is *how* to get rid of controls and return to convertibility.

(i) The first requirement is *genuine* internal equilibrium in the country which is endeavouring to re-establish convertibility. As long as a country is spending more on consumption and investment than is warranted by its current resources of domestic origin, it cannot help running up a deficit in its balance of payments. On the other hand, experience shows that, if internal stability is reached, most of the difficult problems in the balance of payments disappear automatically, especially in a period of strong demand on the world markets. It will, in particular, be found that increased imports are apt to lead to increased exports, since the additional goods from abroad will absorb a part of the available purchasing power and will thus release a larger share of goods for outside the country — this being one effect of the mechanism of adjustment which comes into play when the volume of money is no longer excessive in relation to the supply of goods and services.

(ii) It will hardly be possible, however, to bring all the conditions for convertibility into being at one stroke; and, therefore, the countries will very likely resort to a gradual process under which they would begin to *lift import restrictions* on goods and services in order to get trade moving more freely. This would automatically lead to a relaxation in exchange restrictions, for freedom of imports presupposes a corresponding freedom of payments. It would also make it possible for the true value of the currencies involved to be judged more accurately — since it is only when these currencies can be freely used for purchases on the various markets that their real strength can be gauged. Increased imports at the same time help to fill the market and thus to restore a better relation between the volume of money and the supply of goods and services.

(iii) At the very beginning of a liberalisation period, however, deficits may arise in the balance of payments (as was the case, for instance, in the Netherlands and Germany) and it was largely in view of such contingencies, likely to ensue from the liberalisation of trade, that the European Payments Union was set up to provide *additional resources as part of the foreign aid* available in case of need.

As far as relations with the dollar area are concerned, it was perhaps natural that the first objective of Marshall aid was to help to pay for dollar imports and to use counterpart funds to increase the volume of production. But — considering the relatively slender reserves of most European countries — it would be a good thing if a substantial part of the remaining Marshall aid, and of such other assistance as may be forthcoming, were earmarked for the purpose of strengthening monetary reserves rather than devoted to particular industrial projects (such as the building of another factory or another power station). For the countries themselves would be able to carry out these projects gradually by means of the funds which would be supplied by the annual flow of savings, once confidence in their currency is restored.

But is not all this a rather theoretical approach to a problem which, in practice, is being aggravated at the moment by a return of the "dollar gap", forcing such important countries as *Great Britain and France* to cut down their imports, *i. e.* to practise the reverse of liberalisation? This is true, but it may be pointed out as well that Belgium and Italy, two countries with a persistent surplus in the European Payments Union, have recently freed their imports from other countries in the Union from all control; and Germany is on the point of restoring the liberalisation of trade on private account at the rate of 50 to 60 per cent. All the same, through the importance of their commercial relations, Great Britain and France are, of course, in a key position, and the measures which they take exert a considerable influence on the trade of other countries.

The increased tension in the foreign exchange position of Great Britain and France is largely an effect of the rearmament programmes, which clearly cannot be carried out without a retrenchment in other lines of expenditure. The heavy deficits which suddenly appeared in their balances are, however, only partly due to an increased adverse balance of trade; prepayment of imports and the tardy arrival of payments for exports, as well as other movements of funds, account for perhaps as much as one-half of the deficits incurred in some recent months. The fact that prepayments have been made, etc., will very likely bring some relief in coming months, but only if in the meantime confidence in the currencies has been restored by the taking of steps to remedy the fundamental position.

Both France and Great Britain know, of course, that the curtailment of imports can be defended only as a temporary emergency measure, which is the more regrettable as running counter to the permanent interests of these countries and in some ways even aggravating their position (since a limitation of supplies on the domestic markets tends to intensify inflationary pressure). The only really effective steps are those designed to bring about a higher degree of internal equilibrium. To that end a number of different measures will be required, including retrenchment of budget expenditure, curtailment in some cases of civilian investment and the restoration, generally, of a better balance between the volume of money and the supply of goods and services. But it will necessarily take some months to get measures in these spheres adopted and put into effect, and it is therefore in the field of short-term credit that the more immediate action has primarily to be taken — including an increase in interest rates. Both the Bank of England and the Bank of France have raised their official discount rates, with due adjustments in other market rates. So far, so good; but, in the first place, it has to be considered whether the increases thus made are likely to prove sufficient and, in the second place, these measures of monetary policy have to be followed up by the attainment of genuine budget equilibrium at a level which does not put too great a strain on the economy. Moreover, when the existing volume of money is still too large in relation to the supplies of goods and services, it may be impossible to restore sufficient balance by an increase in output together with a contraction in the means of payment, and then recourse must generally be had to price increases as well — especially as regards such goods and services as have been kept artificially cheap.

It is only if serious steps are being taken to restore internal equilibrium that there is any use *in granting additional aid for the purpose of strengthening monetary reserves; for such aid must not be dissipated.*

As far as the pound sterling is concerned, a return to convertibility would mean a very great step towards improving the world's currency condition and one which would be greeted with genuine satisfaction by the countries on the continent of Europe. For it would then be possible to discard other more artificial devices which are not a satisfactory substitute for such a clearing centre as the London market could become on the basis of a convertible currency.

Perhaps it is too much to hope that, at a time when so great an effort is going into rearmament, the strength and resources will be found for a rehabilitation of currencies. But rearmament differs in many respects from war and, not least, because the former may be achieved side by side with an intensification of world trade, since there is no destruction of shipping to hinder such a development and there is, in general, a strong commercial demand conducive to an increase in the volume of foreign trade; this is, in fact, what has been happening during the last year and it is in sharp contrast to the drastic cutting-down of world trade which is bound to take place during a world war. With international trade on the increase, it is not less but even more important than before to continue working towards currency convertibility; and this is especially the case for western Europe, which cannot live under closed-area conditions, dependent as it is on obtaining raw materials and foodstuffs through trade with other continents. And for the whole western world, in which the United States is the strongest economic partner, it would be more than unfortunate if the present state of division into several monetary areas were perpetuated. It is not only that such a division will cause friction of many kinds; there is perhaps the additional danger that those currencies which are non-convertible will fail to find a natural equilibrium and will therefore, in a series of recurrent crises, be driven to more or less desperate measures, with ultimately grave repercussions, on the better-off countries — as happened between the two wars. There are, therefore, strong political and other reasons for coming to a genuine currency settlement before long and notwithstanding all the difficulties caused by the rearmament.

NEW INFLUENCES ON COMMODITY MARKETS

BY HEINZ HEYMANN, LONDON

The year just ended has been one of the most momentous in the long history of world trade commodities. It has provided a number of lessons, the application of which will be of utmost importance to the future of supplies and prices and thus of international economic balance. But the world market position at the end of 1951 differed greatly from that in the opening weeks of the year. Instead of being haunted by crippling shortages and uncontrollable advances in prices, private entrepreneurs as well as Government agencies are once again worried by potential surplus supplies and possible market recessions. After the havoc the "slump mentality" had played with the equilibrium of the commodity trades in the past six years it would be a true catastrophe if short-term market and price movements were once again allowed to influence long-term planning and policies. Never before has the need of assessing the current state of the world trade in primary commodities against a wider background been more imperative than on the threshold of 1952.

The Commodity Situation in 1951

At the beginning of 1951 the wild upward movement of world commodity prices, which had been set into motion by the invasion of South Korea in June 1950 and which, as such, had followed the somewhat illogical "post-devaluation-boom" of the previous nine months, found itself in an advanced stage. The rise in prices, secured over the previous six months, though complex and unequal, proved unusually steep and, in some of its features, unprecedented. Still, the fear of shortages and thirst for supplies proved so pronounced that all sense of proportions in assessing the relativity of prices appeared to have been lost.

The position changed sharply in the spring of 1951. After growing hesitation and wide fluctuations in either direction in February and March, a sharp recession got under way, which hit a number of "Sterling Commodities", such as wool, rubber, tin, jute and cocoa, with particular severity but left several of the leading "dollar commodities", including copper, lead, zinc and oil, quite untouched. This recession continued until the late summer. In the second half of September, after several weeks of stagnation on most markets, there appeared some distinct signs of a new change in the tide. Prices for agricultural products with few exceptions (sugar and cocoa) developed growing strength in spite of large overall world crops. Quotations for several metals (lead and zinc) saw in October their first upward adjustments for a year and even raw wool, after nearly six months of continuous drift, staged a marked recovery at the turn of September and in the early days of October. But, while the "dollar commodities" maintained, and even increased, their strength for the rest of the year, the majority of "Sterling Commodities" fell back from the new plateau reached in the early autumn.

As a direct result of these conflicting movements the international commodity price structure reflected at the end of 1951 once again the unbalance between the prices for dollar and non-dollar commodities which had given such serious cause for concern in 1947 and 1949 and had greatly helped to bring about the introduction of Marshall aid in the earlier year and had caused partly the wave of currency devaluations, headed by that of the £ Sterling, in the latter. Against this background it is not surprising that the international dollar shortage, which was greatly relieved as a direct outcome of the "Korea boom" (during which the United States bought heavily foreign basic commodities at mounting prices), once again turned more serious in the autumn of 1951. Even though the revived distortion in the relation between prices for dollar and non-dollar products provided by no means the sole reason for the new dislocations in the international payments position, it proved a very powerful one; especially as the shift in prices indicated major changes in the relative demand for the various groups of commodities.

But it was not only the relative position of dollar and non-dollar commodities which, towards the end of 1951, stood in such marked contrast with the situation at the beginning of the year. Also the overall situation appeared, at least on the first view, to reflect something approaching a transformation. While wild buying competition had overshadowed the entire market scene early in 1951, hesitation and uncertainty had regained the upperhand in the closing phase of the year. Increased buyers' resistance on the markets for a number of consumer goods had left their mark on the enterprise of industrialists but the defence programmes progressively absorbed rising amounts of materials in recent months and, towards the close of the year, were expanding at an advanced pace. The inflationary pressure, in so far as it found its reflection on the commodity markets, has hardly abated and, in spite of more serious attempts in some countries to cope with it, is likely to become stronger rather than weaker as the defence programmes unfold themselves fully in 1952. For some foodstuffs the "peace scare" may have gained some tangible influence since the autumn (by inducing buyers to draw on their emergency stocks without replacing them); it has certainly not been a real factor on the markets for industrial raw materials. And the state of physical supplies has, if anything, developed more disappointingly than had been hoped for. There has been no lack of initiative in raising production of primary commodities as rapidly as possible. But, apart from a few isolated examples among agricultural crops, the actual growth of production in 1951 has been painfully slow and, in many instances, hampered not only by shortages of labour, machinery and stores but also by political strife and labour unrest.

Why then, has the general state of the world markets undergone such wide changes in the course of 1951, although the basic conditions have shifted relatively little? The simple answer to this question is the old experience that very slight changes in the impact of supply and demand can have the most forceful psychological repercussions on markets and prices. The overall supply position for primary commodities has not visibly improved over the past twelve months; in those instances where a more rapid increase in production has occurred — cotton is the most important example — it has gone little further than replacing the withdrawals from the carry-over stocks during the previous year. On present indications an improvement of the balance through increases in production will not take place till very late this year, and it may well be delayed until 1953. But the main feature of the year just ended has been less aggressive competition for the supplies available. Increasing price consciousness on the side of buyers and the psychological reaction of the temporary consumer resistance in some civilian markets have helped to reduce the scramble for supplies. But the main responsibility for the overall change in the impact of demand must be attributed to two specific influences, a revision of the United States stockpiling practice and some progress towards an orderly sharing out of scarce resources.

Stockpiling Policy of the United States

These two influences have proved of such paramount importance in the course of 1951 that they call for some closer analysis. Strategic stockpiling by the United States Government is not a new development; it has been initiated before the second world war and even the present "Strategic and Critical Materials Stockpiling Act" (the Public Law 520 of the 79th Congress) went on the Statute Book as long ago as July 23, 1946. That act includes a provision that, "so far as practicable", purchases for the stockpile shall be made from supplies in excess of current industrial demand. Already before the end of 1948, the Munitions Board, which is the United States' Government agency in charge of stockpiling, arrived at the conclusion that it was no longer feasible to limit purchases to surplus materials, but it was not until after the invasion of South Korea that stockpiling seriously interfered with the state of the open markets. In fact, purchases on the spot markets for the inclusion of supplies into the United States stockpile in the autumn and early winter of 1950 have been much smaller than is commonly supposed but their direct and indirect (psychological) influence has been powerful enough to gain great weight.

The official stockpile report of the Munitions Board to Congress for the second half of 1950, submitted in the last days of January 1951, had still stated that "the progress to date is not considered satisfactory and pressure must continue to be exerted by all agencies concerned with the problem to the end that stockpile purchasing and actual delivery rates will be further increased". But within a month after this statement was drafted, some change in the buying practice had been introduced. Instead of concentrating on immediate and nearby purchases, the stockpiling authorities of the United States shifted the main weight of their transactions to the placing of contracts for delivery within one to two years. As this move was accompanied by the diversion of some deliveries for the stockpile to current use for essential purposes (and, in the autumn, supplemented by some specific releases of metals from the stockpile) it provided an instant relief to the commodity markets.

But it must not be overlooked that, in contrast to a widespread belief, stockpiling by the United States Government has not been reduced in 1951. On the contrary, the placing of contracts for stockpiling in the first half of last year at $ 1 645 000 000 was almost four times as large as the total of $ 430 000 000 for the preceding six months (the wildest phase of the "Korea boom") and, indeed, not much less than all orders placed from the middle of 1946 till the end of 1950. Figures for the second half of 1951 are not yet available but they are known to have remained extremely high. A substantial part of the record orders, placed since last February, will fall due in 1952 and 1953 and will, thus, regain a tangible influence on the current supply position even if spot and nearby purchases are not revived on a larger scale.

Distribution Problems

The temporary relief granted by the change in the United States stockpiling practice has been further enhanced by the work of the International Materials Conference. After a slow and hesitant start from the end of last February till the middle of the year, this conference has succeeded in obtaining the approval of its 28 member countries for a series of allocations measures. Disregarding a limited number of small emergency allocations for newsprint to some specially needy countries, the third quarter of 1951 saw the introduction of an interim scheme for tungsten and molybdenum and of a general allocation plan for sulphur. In the fourth quarter of the year these plans were renewed and four additional scarce commodities — copper, zinc, nickel and cobalt — were for the first time added to the list of allocated products. For wool an attempt to reach an understanding has failed, while for cotton the collaborating Governments arrived at the conclusion that no international action will, for the time being, be necessary to ensure an orderly distribution.

Products included in the list of scarce materials to be surveyed by the Conference, for which so far no agreement on distribution has been reached, are lead, manganese, paper-making materials and newsprint. These products are not less scarce than the ones placed under allocations but an understanding on an orderly distribution is greatly hampered by the prevalence of regular long-term contracts and the complexity of their supply and control. Nevertheless, the value of the work done by the International Materials Conference to secure a more orderly distribution of scarce products without unnecessary buying competition cannot easily be overstressed. The fact that all allocation schemes so far introduced are far from perfect and constitute loose "ad hoc measures" which will have to be renegotiated from case to case and quarter to quarter does not alter this conclusion, especially as the psychological repercussions of these attempts at collaboration on the approach and frame of mind of the buyers have been much stronger than the introduction of loose allocation quotas as such.

But even so it must not be overlooked that collaboration within the International Materials Conference comprises only a limited number of scarce raw materials. Basic foodstuffs are entirely outside the province of the Conference or any similar body although their international price problems, largely due to the one-sided national United States farm price supports, are, if anything, still far more intractable and dislocated than those for industrial raw materials. And, while the initiation of orderly distribution schemes by the International Materials Conference has gained an important influence on raw material prices, it must be stressed that, of the seven materials so far placed under allocation, six (tungsten is the only exception) have only to a very small extent taken part in the "Korea boom", as their prices are fixed by their producers over long periods and thus relatively unsensitive to sudden booms and slumps.

Future Prospects

At the end of 1951 the overall appearance of the world's primary commodity markets has been far more balanced than at the beginning of the year but the relatively calmer atmosphere on the markets and the much reduced fluctuations of prices can all too easily be misleading. The state of the commodity trades continues to be dangerously artificial and, while temporary delays in deliveries to the United States stockpile, the promotion of allocation schemes by the international materials conference and the defence of uneconomic farm prices by the United States farm supports (including tied loans for the export of farm products to Europe and Asia) tend to promote some greater stability in the short run, they do not touch the core of the serious commodity supply and price problems with which the world is confronted. In one way the calmer atmosphere of the past few months is, indeed, not without its dangers. The pronounced and general fears of long drawn out shortages, which the "Korea boom" had helped to spread, have given way to a growing feeling of security about supplies and even to a revival of the "slump mentality", which has been gaining ground in a number of industries — wool, rubber, cotton, hard fibres, tin, cocoa and sugar — for several months past and which showed signs of becoming more general in the closing weeks of 1951.

It would be disastrous if this tendency were allowed to make progress, for the calmer atmosphere on the world's commodity markets recently encountered is bound to prove a passing, and possibly short-lived, phase, unless it is actively used to tackle the fundamental issues which the past eighteen months have so strikingly brought into the open. In an article published in these columns a year ago it was brought out that the wild boom on the world markets in the second half of 1950, though supported by the impact of a number of powerful short-term influences, had its real foundation in a fundamental disequilibrium between supply and demand. Detailed studies since initiated by the International Material Conference, the Food and Agriculture Organisation of the United Nations and the member countries of the British Commonwealth have supplied a great deal of evidence about the great extent and seriousness of this disequilibrium.

So far emergency action designed to relieve the immediate pressure by delaying stockpiling and sharing out scarce supplies has, naturally, commanded all concentration. Here and there it has been supplemented by moves to stretch supplies by economy measures in the application of scarce products. But the only action that can restore a genuine new equilibrium, the expansion of the productive resources, still remains to be resolutely tackled; steps in its direction that have been initiated during the past year should provide a slightly better supply towards the end of 1952 and in 1953, but they are hopelessly inadequate in relation to the fundamental deficiencies which the research undertaken in recent months by international bodies has revealed. It is gratifying that the need for expansion, after having been rejected by producers and producing Governments on the basis of their inter-war experience for so many years, is now being openly recognized and propagated by the International Materials Conference and several other official international bodies and organisations. But the recognition of the primary task for 1952 and beyond, is only a first step. To bring it to account suitable pre-conditions will have to be provided, especially as the halt in the general upward movement of prices and the reactions on the markets for some specific commodities have not only reduced the incentive to go ahead with long-term development but even revived the doubts in the wisdom of planning for expansion while the "outbreak of peace" and the limitation of arms production in a number of months, or at latest years, are a possibility.

But if the experience of the past eighteen months and the results of the international inquiries into the relation of supply and demand during 1951 have proved anything, it is the fact that, for many years to come, whether the world will be arming or striving for peace through economic stability and well-being, its preoccupation will be one of securing sufficient supplies for all needs and not one of absorbing surpluses. Certainly, the present level of prices will not be maintained for ever and the lesson of 1951 has once again proved that even moderate changes between active supply and active demand can result in pronounced shifts of individual prices and in the relation between the various groups of prices. The need for taking up the problem of prices with a view of reaching an understanding on a relative measure of long-term stability without interfering with the needs for flexibility and economy is, indeed, the supreme task confronting the world today in its aims of overcoming the existing shortages and the dislocations arising out of them, including the dislocations in the monetary field.

Some first developments in this direction are beginning to take shape. In a survey of its future problems, issued on November 9 last, the International Materials Conference pointed out that "although most of the Committees (*i. e.* the Commodity Committees working autonomously within the Conference, the author's interjection) have not yet dealt with problems of prices, it is likely that the consideration of methods of increasing production and distributing available supplies will require that they give attention to such problems" While the scope of its tasks is limited and, in particular, excludes basic foodstuffs, the International Materials Conference is certainly a suitable platform for conducting studies into price problems. But an understanding on prices issues remains primarily a political task and will ultimately have to be tackled on the highest political level. In this connection it is of substantial practical interest that the British Commonwealth countries have for some months past, for obvious reasons, become once again preoccupied with the issues of international commodity price relations and have had fairly detailed consultations on the issues involved.

Almost certainly the matter will play a prominent part in the conversations which Mr. Churchill and his advisers will have in Washington this month. Immediate results from this initiative are not to be expected, but a case for international study and action will most probably be made out. If, as a result, the stone will be set rolling to bring clarity into and an understanding for the commodity price problems, the year 1952 may well prove the beginning of a new era in the long-term development of the international commodity markets and, with it, of a return to more stable world economic conditions. Failing greater understanding of and on the price issues, the outlook would be bleak, for the obvious lessons arising out of the disequlibrium between supply and demand over the past eighteen months have not been grasped with the thoroughness needed to ensure remedial action and, at the end of 1951, it appeared that even the impressions left by the "Korea boom" were again on their way of being forgotten.

IMPORT AND EXPORT PRICES

Price developments during the last year have in general been unfavourable to most countries in Europe. Britain's foreign trade, for example, resulted in an excess of imports of more than 1 000 million pounds for the first three-quarters of 1951. If prices had remained at the level prevailing during the same period of the previous year, the excess would have been merely about 570 million pounds. Similar conditions were obtained for all OEEC countries, which for the first half of 1951 reported an excess of imports over exports of about 1 980 million dollars. Had the prices remained the same as for the early half of 1950, the deficit would not have exceeded 690 million dollars. For all these countries, the export prices from 1950 to 1951 rose by 1 860 millon dollars, or 17 %, whereas the increase in their import prices amounted to 3 150 million dollars, or 27 %.

This unfavourable development in terms of trade during the first half of 1951 burdened these countries with an added charge of about 1 300 million dollars, partly owing to the sharp rise in the prices of raw materials consequent upon rearmament. In recent months a weakening of raw commodities set in, while finished goods continued to rise, resulting in more favourable terms of trade for the OEEC countries.

Sweden, however, has experienced a contrary development, with export prices rising much more rapidly than import prices since the autumn of 1950. If the prices then prevailing had remained stable, the excess of imports for the first three quarters of 1951 would have amounted to about 1 250 million kronor; actually it reached only about 630 million kronor, or just about half the amount. In respect of imports the price increases setting in last year were the same as for all OEEC countries, or about 27 %, but the rise in Swedish export prices reached the astounding figure of 52 %, as against merely 17 % for all OEEC countries. The greatest leap was recorded for the products of the forest industries, which practically doubled in price in one year. Metals and metal manufactures, on the other hand, rose by a modest 17 % and agricultural produce by only 12 %. The increase in export prices for the latter commodities was in fact less than the simultaneous rise in general Swedish wholesale prices.

However, the prices actually obtained for import and export commodities lag somewhat in respect of the prices simultaneously quoted in the various commodity markets. For this reason, official price statistics, which are based on market quotations, indicate greater fluctuations than the prices actually obtained in the foreign trade and therefore forecast the future development in the Swedish terms of trade.

During the war and the postwar period, the entire wholesale price structure has been ascending. In this general trend, import and export price rises have been greater on the whole than the movement of the general price level. Up to the late autumn of 1950, import prices were leading. This lead has been maintained since 1940 when the import price index was 25 % higher than the general price index; at the end of hostilities this differential had widened to 45 %. During the first postwar years, import prices weakened relatively, but towards the end of 1950 they rapidly climbed to a peak 50 % higher than the average wholesale price level. Export prices, on the other hand, remained during the war merely a few per cent. above the general price level, and, as late as in October 1950, the relative improvement in prices setting in upon cessation of hostilities had not brought them up to the level of import prices.

In the above discussion of the relative price movements, the wholesale price index published by the Swedish Board of Trade has been used, and in these series 1935 prices are set at 100. However, since these statistics do not take into consideration the structural changes in foreign trade taken place subsequent to 1935, they tend to over-emphasize the rise in import and export prices. This bias has been removed by a recent revision of the price statistics. In the new series, the value of the 1950 imports and exports has been calculated on the basis of the prices prevailing in different years, whereby a more accurate picture is obtained for the influence of price movements on the foreign trade as of today. Some pertinent figures culled from this modern series are given in the following table:

Swedish wholesale prices.

Index numbers (1935 = 100).

	All commodities	Import goods	Export goods	In % of the general price level	
				Import goods	Export goods
October 1950	230	307	298	133	130
» 1951	306	366	464	120	152
Increase	33 %	19 %	56 %		

From the above figures it is apparent that in October 1950 import and export prices reflected an increase since 1935 of 33 and 30 %, respectively, above the rise of the general price level. The reasons for these increases are many, a major one being a rise in the dollar exchange rate of more than 30 % since 1935.

During the 12-months period ending October 1951, the wholesale index has continuously risen, from 230 to 306 (taking 1935 prices as 100) or an increase of 33 %. During the same period, the import index first rose from 307 in October 1950 to a peak of 381 in April—May 1951, or by 26 %, and subsequently declined to 366 in October 1951. The general Swedish wholesale price level has therefore risen considerably more than the import prices during the past year, even though a certain stabilization began to take effect at about the middle of 1951, when a slight weakening in import prices began to set in. During 1951, Moody's Index of American Commodity Prices has also fallen by about 15 % from its peak value at the beginning of February last year to the end of November, and the Bureau of Labor's wholesale index has also dropped slowly during the period April—October, by altogether 3 %. These figures force the conclusion that the price increase in Sweden is greater than warranted by foreign influences.

It is against these developments that the movements in export prices and the concomitant Swedish proposals to reduce the excess earnings of the export industries by fiscal measures must be judged. As stressed above, the export price rises are chiefly concentrated to the products of the forest industries, and in most cases the resultant earnings are ultimately reaped by the owners of timber tracts. The proposals to levy an excess profit tax on these earnings have given rise to demands from various sources that the revenue thereby obtained should be used for various subsidy measures aimed at stabilizing prices and the cost of living.

Such a scheme would naturally present a very difficult balancing problem. The current price boom about to be subjected to excess profit taxation is commonly regarded as being of a temporary nature. If this excess price boom should collapse, we should as a result of an imprudent subsidy policy be committed to a higher standard of living than could be financed by available means. At the same time, foreign payments would, automatically, be subjected to severe dislocations. If investments and consumption are not adequately reduced, a sudden drop in export prices would inevitably lead to the discovery that more fuel had been stoked under the cauldron of inflation, and a crisis in the balance of payments will, as usual, be the danger signal that the cauldron is boiling over.

E. H.

GENETICS AND VEGETABLE FOOD SUPPLIES

**BY DR EWERT ÅBERG, ASSOCIATE PROFESSOR,
ROYAL AGRICULTURAL COLLEGE, UPPSALA**

In his speech at the inauguration of the Seventh International Botanical Congress in Stockholm July 12, 1950, *Dr. F. T. Wahlen,* head of the Agricultural Section of the Food and Agricultural Organisation of the United Nations (FAO), stated that the scientists who occupy themselves with plants and their changes hold the key to the greatest treasure of mankind, since all life is dependent on the capacity of the green pigment of the plants, the chlorophyll, to unite carbon, oxygen and hydrogen into chemical combinations with the aid of solar energy and on the capacity of the plants to produce proteins. There is no form of energy transfer on the earth comparable in magnitude with that going on in the numerous green leaves of living plants. In saying this, Dr *Wahlen* undoubtedly pointed out to our botanists a field in which further research is necessary in order to make it possible for us fully to exploit Nature's riches, *viz.* the field of assimilation. These words were addressed to people engaged in theoretical as well as applied botany. They were based on a thorough knowledge of the achievements already made by man in the effort to augment the food supply of the world through planned changes in the genetic composition and in the vital processes of the plants.

The significance of genetics for food supply must therefore be considered both from the point of view of the contributions of man and from that of the inherent capacities of the living plant. The success of man in producing genetic changes in a cultivated plant in order to contribute to an increase of food production is dependent upon the genetic constitution offered by the plant. Our modern technical means are useful only when they can be applied to a material with valuable qualities.

Primitive plant breeding and the collection of new material of cultivated plants

The modern principles of heredity only date back about 50 years. One may therefore be inclined to believe that only those achievements which have been made since the laws of inheritance became generally known, in 1900, and since the methods to make use of them in plant breeding have been progressively refined, need be considered when investigating the contribution to food supply made by genetics. If is true that the modern principles of genetics have led to marked improvements of our cultivated plants which may mean more kilos and crowns per hectare for the farmers and more calories for the consumers. The plant improvement of earlier times, which was carried out without knowledge of the laws of inheritance, must not be neglected, nor should its importance be underestimated.

The oldest way of using plants for supporting life was to let cattle out to graze and then slaughter the beasts for food. Utilising the plants in such a way did not lead to any improvement, however. On the contrary, the result was a nomadic life, man being forced to follow the cattle on their wanderings in search of new pastures. Not until man discovered how to make use of the more nourishing parts of the plants, as for instance their seeds, fruits and roots, and learnt to choose between the plants on basis of the size and quantity of their different components, is it possible to speak of such a selection in regard to genetic qualities which is of some value for the improvement of food production. This selection was made without any knowledge of the laws of inheritance. Cereals cultivated today have a tough rachis whereas the wild varieties, which moreover have to be considered as original forms of the cultivated varieties, most certainly had a brittle one. Where varieties with a tough rachis were found together with those with a brittle one, our ancestors very soon learnt to collect and cultivate only the former varieties. In such a way it was possible to get a greater quantity of useful kernels per surface unit at the time of cultivation. Already here occurred the very first improvement towards varieties with a tough rachis, which now dominate among the wheat, rye, barley and oats all over the world. The improvement arrived at in this way was important enough to satisfy all demands for a long time. Not until the population increased to such an extent as to make famine imminent did the search for new improvements and new crops commence. It was on such occasions that new high yielding crops such as turnips and potatoes were introduced. As world population has increased, and with it the demands on the food supply, one new crop after the other has been put into cultivation. At the moment probably about 250 species are cultivated for food all over the world. This is a very small number compared to the number of wild species, and the possibilities for increasing the number of cultivated plant species therefore by no means inconsiderable.

Thus the oldest method of plant improvement may be said to have aimed at the mere collection of improved varieties produced by Nature itself in various ways. Even today we have not passed this collecting stage, and for the sake of future development we must hope never to pass it. It is impossible to envisage a continued improvement on the mere basis of plants cultivated today; their content of genes for growth and production is too small. We must continue to seek for new material with new genetic properties, and we may obtain a great deal of this material by collecting it in different places in the world. It is only necessary to point to the importance of the expeditions to Central and South America for the changes in our potato material, and to the great possibilities for improvement opened up by the extensive material of *Solanum* varieties collected in the course of the expeditions to Central and South America. As an example one may also refer to the influence of the collection of soybeans in East Asia (Manchuria, Korea, Japan) on the transfer of a great part of the soybean cultivation from Manchuria to the United States; this transfer has in its turn contributed to the creation of better varieties, intensive soybean breeding having been carried out in the United States with the aid of modern breeding methods. Although these examples have been cited in order to stress the importance of the collection of material with new genes, especially in far distant regions, they must not be interpreted as implying that this is the only way to obtain new compositions of genes. By the aid of modern technical means it is also possible to create part of the original material necessary for continued breeding work.

The laws of inheritance and modern plant breeding methods

It has already been mentioned that the most important results of plant breeding have been obtained during the last 50 years. This is of course due to the fact that not until then have the laws of inheritance been effectively applied both to theoretical genetics and to plant breeding. When plant breeding commenced in our own country about 60 years ago, *Darwin's* theories were prevalent. The main thesis of Darwin was that the variation in the plants is haphazard and that by selection it is possible to change the type in a certain direction. By a repeated mass selection of individuals having the desired properties it would be possible to arrive at improved varieties. Quite soon, however, there was a change from mass selection to individual selection. This latter form of selection has also been called the *pedigree method*. According to this method the offspring of single selected mother-plants belonging to self-fertile species are grown. In this way there is obtained a constant variety which can be used for practical purposes if its properties are satisfactory. This method has been very successful. "Victory" oats (Segerhavre), for instance, which was put on the market as long ago as 1908 and is still cultivated in some parts of Sweden, was bred in such a way. The laws of Mendel, according to which permanent hereditary qualities are inherited unmodified from one generation to the next, were formulated as early as the 1860's but passed unnoticed until 1900, when they were re-discovered. After these laws had become generally known, it was possible instead of selection to introduce so-called combination breeding, *viz.* different individuals were cross-bred; by re-grouping the hereditary characteristics of these individuals entirely new varieties, having better cultivation properties than the parent varieties, could be obtained. Through his research work at Svalöf, *Nilsson-Ehle* has greatly contributed to the understanding of the value of this cross-breeding method within the field of plant breeding, a value which it still maintains in spite of more recent breeding methods.

The subsequent development of research into the principles of genetics led to the use of mutation and chromosome multiplication in order to call forth such genetic changes in the plant as could be further utilized for breeding. Mutations, being spontaneous changes in the genes, are principally obtained by X-ray treatment of seeds. The first results of X-ray treatment for the development of mutations did not seem very promising, as this treatment very often led to a decreased vitality of the plants. The general opinion was that X-ray treatment could only lead to haphazard, destructive changes of the genes, of no value for the purpose of breeding. It is very much thanks to *Åke Gustafsson*'s experiments on barley that this opinion has been revised. Gustafsson has been able to prove that the new hereditary properties evoked by X-ray treatment are in principle of the same kind as those occurring spontaneously. Through X-ray treatment it is possible to multiply the normal range of variation. If the variation is strong there are great possibilities for the selection of plants which may be of value for future breeding work and which may contain entirely new hereditary properties.

The chromosome multiplication is also based on purely theoretical investigations, according to which the number of chromosomes (the carriers of the genetic properties) in the plant cell may be changed by external influence. Experiments aiming at changes in the number of chromosomes have long been carried on, but the chromosome multiplication had no practical value until the American scientists *Blakeslee* and *Nebel* proved that colchicine is apt to influence the kernel formation of the cells so that the kernel-dividing mechanism is put out of function for some time, the chromosomes continuing their longitudinal division. The result is that a cell, instead of dividing normally and giving rise to two cells with the same number of chromosomes as in the original cell, produces a cell having double the number of chromosomes. In course of the last few decades, this multiplying technique has been so well developed that it is no longer a problem to change the number of chromosomes in a plant cell. Such a change in the number of chromosomes may bring as a result that the vegetative parts of the cultivated plant in question will develop in a more vigorous way after the chromosome multiplication, but it may also lead to a decreased production of seeds, so that a certain sterility must be reckoned with for plants with a multiplied number of chromosomes. The multiplied varieties, usually called polyploids, are utilized for further work on improvement. Excellent results from chromosome multiplication have already been reached in, for instance, rye and varieties of clover.

The theoretical studies of inbreeding have become of immense importance for the improvement of cross-fertilizing plants. The investigations now being carried out in this field are of particular interest at the present time, for it must be acknowledged that there is still a good deal of uncertainty as to the best methods of improving cross-fertilizing species. One of the main problems from the theoretical point of wiew is that of discovering the causes of inbreeding degeneration and the effect of cross-breeding in the form of stimulated growth which is obtained by crossing inbred lines. Such a stimulated growth is used for practical purposes in the modern methods of corn breeding.

The theoretical basis for plant-improvement is, however, not dependent solely on the genetical qualities of the plants but is also connected in part with the external conditions under which the improvement is carried out. This has become of special interest to Sweden, in view of the long north-south extension of the country. Varieties produced in Scania are not always suitable for central or north Sweden, and consequently the work on improvement must be carried out in different parts of the country. All this has had as a result that there is a well organized local plant-breeding complementary to the centralized one. This local breeding makes it possible from the very beginning to take into account such factors as temperature, light conditions and humidity in performing the selection, and thus to create more suitable varieties and strains.

The importance of plant breeding for food production

It is natural that the practical man should ask what the improvement methods referred to above have really meant in terms of increased food production. It is very difficult to give exact figures because the bigger yields obtained since plantbreeding first began can not be credited to breeding alone as plant breeding has made its contribution simultaneously with many other changes and improvements in crop production. Among the latter ones should be mentioned the increased application of fertilizers, the employment of chemicals to combat diseases, insects and weeds, and better equipment for tilling the soil and sowing and caring for the crops. Nevertheless, in 1946 *Åkerman* attempted to assess the contribution made by plantbreeding to the increase in yield. Taking *autumn wheat* as an example, it may be said that plantbreeding is responsible in Sweden for an increased yield of 400 kilograms per hectare over the period 1885—1935, equivalent to about 30 per cent. This would represent roughly half of the total increase in yield per hectare during these years. If this figure is accepted also for the present situation and converted into kronor per hectare according to current prices it is found that the increase works out at kr. 128 per hectare. The area under autumn wheat in 1950 being 178 200 hectares, this is equivalent to an increase of 71 280 tons in the total yield and to an increase of kr. 22 809 600 in income. But although the yield per hectare has, under the present circumstances, been one of the principal aims of improvement, we cannot express the contribution made by such work in terms of yield alone. There are other aspects to be considered. Among the most important ones of these, in the case of Swedish wheat, is the improvement of baking quality. During the first thirty years of this century Sweden imported large quantities of wheat, practically all of it being American wheat with good baking properties. This was mixed with Swedish wheat to make a product satisfactory in regard to baking quality. But the increased yield per hectare referred to above led to a demand for cutting down of imports, and this in turn was followed by a demand for improving the quality of the Swedish wheat by increasing the gluten content as well as the gluten quality. The efforts to achieve this have given as a result that Swedish wheat alone can be used to produce a flour that satisfies very high requirements as regards baking quality. This has been possible by crossing our older varieties either with high-quality Swedish "land sorts" *(lantvete)* or with foreign varieties having very good baking qualities. To a large extent, of course, the improvement of the baking quality of Swedish flour is also due to the fact that it has been possible to increase the cultivation of spring wheat, thanks to the arrival on the market of new and improved varieties of spring wheat with high yields, spring wheat having as a rule a higher baking quality than autumn wheat.

While these problems have been found to be the most important ones from the Swedish point of view in the field of wheat improvement, abroad other problems arise in the same field. Though dissimilar, they are not less important than those we faced in Sweden. As an example may be mentioned that for many years past wheat cultivation in the USA has had to contend with serious attacks of rust which at regular intervals threaten to cut down or even destroy altogether the yield of the wheat fields in, for example, the Middle West. Black rust is the principal enemy, but there are also attacks of yellow rust. The basis of the improvement work which may be said to have solved the problem has been genetic studies of different species of the genus *Triticum*, but genetic studies of the rust fungi that attack wheat have also contributed. It has been found that different species of wheat, such as *Triticum durum* (macaroni wheat) and *Triticum dicoccum,* both of which have 28 chromosomes, are resistant to the black rust that causes the damage, while *Triticum vulgare* — the ordinary wheat with 42 chromosomes — is not. After theoretical studies had shown that it would be possible to cross a species having 28 chromosomes and another having 42, work was started with this aim in view, and finally there were produced cross plants of the same type as the ordinary wheat but with the resistance of the 28-chromosome wheats as regards black rust. From such a cross, for example, there was obtained the Thatcher variety of spring wheat, which in 1935 — a very bad year for rust in Minnesota — was only attacked by black rust to the extent of 5 per cent, while the Marquis variety, cultivated formerly, was attacked to the extent of 86 per cent. Similar crosses have since been carried out by the American research worker *McFadden,* who succeeded in producing two varieties — Hope and H-44 — both of which were rust resistant. These two varieties have become of particular importance, inasmuch as they enter into practically all the newer improved varieties of wheat in the USA and have conferred their resistance to black rust on these. It is difficult to say exactly what this has meant in terms of yield per hectare or total annual wheat yield, but the figures just quoted for Thatcher and Marquis give an idea of the importance of the contribution to food supply that we owe to the improvement in question. Since it has now also proved possible to discover the genetics of the rust fungi and since *Stakman* and his co-workers, basing themselves on this, have been able to divide these fungi into different races about which it is known that these can not attack all wheat varieties but only some of them, the work of improving the disease resistance of the varieties can be given an even more exact direction than before.

The most striking example of the contribution of plant breeding to food production is undoubtedly, however, American hybrid corn. Corn is a cross-fertilizing plant. The idea behind the production of hybrid corn is that of utilizing the stimulation obtained when two inbred lines are crossed — a conception that could not be arrived at until the inbreeding problems of corn were known. The inbreeding work on corn was begun in 1905 in the USA by *Schull.* His work was purely theoretical, as was that embarked on simultaneously by *East.* The results of this work became available two or three years later but aroused little interest until several more years had elapsed. Among the private breeders *Henry A. Wallace,* afterwards Vice-President of the United States, was the first to embark on the inbreeding of corn. He began such work in 1913, but is was not until 1919 that he undertook systematic experiments in this field. It was only at the beginning of the twenties that the method of inbreeding with subsequent crossing of the corn came to be tried out to any great extent, and the first commercial cultivation for producing hybrid corn seed took place in 1921. After this, swift progress was made and at the present time hybrid corn dominates the corn growing in the United States. What, then, has this improvement done for the world's food supply? As with all forms of plant breeding, it is difficult to state the answer to this question in exact figures, but the figures given in 1944 by *McCall* point to the great importance of hybrid corn. According to this authority the three biggest corn yields in the USA were those of 1942, 1943 and 1920, the total yields in these years being 3 175 million bushels, 3 085 million bushels and 3 070 million bushels respectively. The acreages on which these crops were grown were 89 484 000 in 1942, 94 308 000 in 1943 and 101 359 000 in 1920.[1] The higher yields per acre obtained in 1942 and 1943 must largely be ascribed to the use of hybrid corn. Together with *Jenkins,* McCall has attempted to give a more exact estimate of the value of hybrid corn from the point of view of yield. These two experts have done this by comparing the corn yields in the five states where hybrid corn was almost exclusively used even as early as 1938—43 — Iowa, Illinois, Ohio, Indiana and Minnesota — with the yield in the same states during the period 1923—32, *i. e.* the ten years immediately preceding the arrival of hybrid corn cultivation. The conclusion reached was that hybrid corn had increased the yield per acre by 18,1 bushels, which means that in 1943 alone, in which year the total area under corn was 31,2 million acres, the increase in the total crop was 564 720 000 bushels, or in terms of tons no less than 16 941 600 tons. If all the land in all parts of the world now given up to corn could be sown with hybrid corn, very large extra quantities of food would be obtained as a result. For some years past a good deal of work has been going on in Western Europe with a view of adapting hybrid corn to European climatic conditions.

---

[1] 1 bushel corn corresponds to 25—30 kg.; 1 acre is equal to 0,4 hectare.

It has been mentioned that the soybean, which is indigenous to Manchuria and adjacent areas, has been grown and improved in the USA during the last few decades, so that there are now, in fact, two regions for soybean cultivation, one in Eastern Asia employing old material and outmoded methods of cultivation, and another one in the United States, where the growing material is continually being improved and where modern methods are applied for the cultivation of the plant. Of course, the rapid development of soybean cultivation in the USA is partly attributable to the fact that the climate there has proved suitable, but there is also the fact that it has been found possible to improve the primitive material by the use of modern breeding methods. As as result the yield per acre and the amount of land under cultivation have been increasing. Thus, whereas in 1941 the soybean was cultivated on 5 855 000 acres, only two years later the acreage was 10 820 000, or almost double. It was then estimated that the average yield would be 17,3 bushels per acre, which would mean that about three-quarters of the United States' annual import of fats before the second world war could be produced within the country by growing soybeans.

Good examples of the part played by plant breeding in raising yields can also be provided by plants of an entirely different type. When, in the middle of the 18th century, sugar beets were first observed by the German *Marggraf* and investigated for eventual improvements by his follower *Achard*, the beets were so poor in sugar content that it did not pay to use them for sugar production. It was not until the French plant breeder *Vilmorin* succeeded in raising the sugar content that sugar beets became of real importance. Since then the sugar content has been still further increased. The earlier sugar beet cultivation in Germany gave a raw sugar extraction of 8—9 per cent, whereas the present figure is 16—18 per cent. What this difference means in sugar yield for Sweden alone is easily shown in figures. Sugar beets are produced on about 50 000 hectares every year and the average yield is about 350 tons per hectare. With a raw sugar content of only 8 per cent 140 000 tons of sugar would be produced annually, whereas with 16 per cent 280 000 tons would be forthcoming.

For our final example potatoes — a familiar Swedish plant subject to a very common disease — may be chosen. Every year our potato crop is cut down severely by late blight. For several years past plant breeders have been searching for ways of producing potato varieties resistant to late blight, with a view to increasing the yield. Many difficulties have been encountered in this task — principally, perhaps, because the scientists have had no resistant material to work on, but also because no basis has been found for judging the inherited resistance of different varieties. In 1939 the Russian scientist *Grechusnikov* discussed the importance of peroxidase in this connection and in a couple of publications issued by the Swedish Plant Protection Institute during the past year *Kammermann* has related his experiences concerning the possible value of peroxidase activity for determining the resistance of potato tops to late blight and the possibilities of making use of this. This is an example that shows how theoretical studies must be carried out in order that plant breeders may be able to get the starting material for their subsequent work.

Planning for the future

After reading the above, the reader may be inclined to think that plant breeders have exhausted most of the possibilities of improving our plants and increasing the food production on our farms. This, however, is not the case. There are considerable possibilities for further progress, but the labour required for achieving that progress is now harder than it was some decades ago. Then a single researcher of vision could accomplish a great deal, since he had rich, virgin material to work on. Nowadays, instead of this it is necessary to make use of a material that has already been drastically changed and to add still further to its advantages by introducing new qualities. In some cases these can be obtained from materials available in Nature. During the second world war there were several examples of new plants which were tested or introduced into cultivation. For example *Osvald* states in the 1951 catalogue of the Swedish General Seed Company that no fewer than sixty new varieties and types of plants have appeared in the company's catalogues during the last ten years. He especially points out how new or almost forgotten plants have come into cultivation to an extent never dreamed of ten years ago. But although in many cases we can count on material collected from Nature, we must not neglect artificial means of producing the starting material on which the scientists may work. This is especially true of the species that have already been improved to a high degree. It means, therefore, that to a much greater extent than before the plant breeding of the future must be based on co-operation between researchers in different branches of botany and genetics. It also means that much more emphasis must be put on modern developments in other fields of crop production than plant breeding.

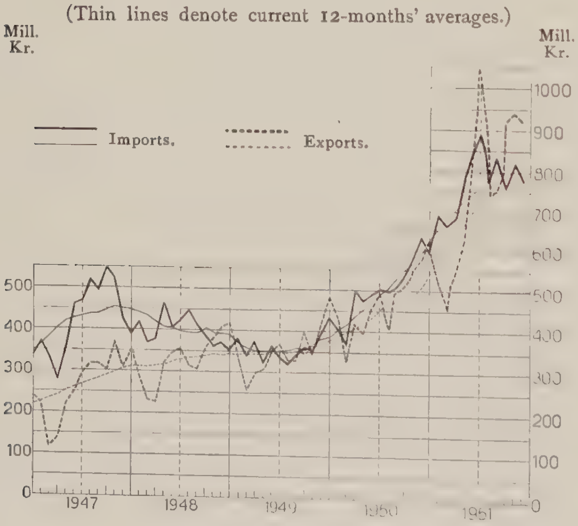
THE ECONOMIC SITUATION DURING THE FOURTH QUARTER OF 1951

The General Situation. Preparations for another round of comprehensive wage negotiations have ushered in the new year. The cost of living rose by a probable 25 per cent. last year, all signs indicating that there has been no cessation in the rise in prices. The fallacy that all price increases are imported from abroad has made impossible a determined defence of the value of money, and we are now dissipating our efforts in combating the consequences of inflation. Bad weather and disease amongst crops and cattle brought severe damage to agriculture. The rise in industrial production and foreign trade has, however, brought about a considerable improvement in the domestic supply of commodities. The increased imports could also be paid for through price rises for important export commodities. This economic improvement resulted in investments in stocks and machinery, along with a definite increase of the country's foreign exchange reserves. A contributory factor in our improved balance of payments has been the transfer to Sweden of fairly large amounts of foreign capital, transactions which were probably to some extent inspired by the fear of a change in the exchange rates of some foreign currencies. The temporary increase of earnings from exports and shipping, together with capital transfers from abroad, has been reflected in the fact that new money has been put into the market. The influences from abroad had little affect on the credit market, for under the requested credit restraint the commercial banks had retained more than 22 per cent. of their deposits in the form of cash and treasury bills, and so gained a stronger liquidity than ever before.

According to statistics of the Federation of Swedish Industries, industrial production, which owing to enormous postwar investments to an amount of 40,000 million kronor, had increased steadily during the last few years, was be-

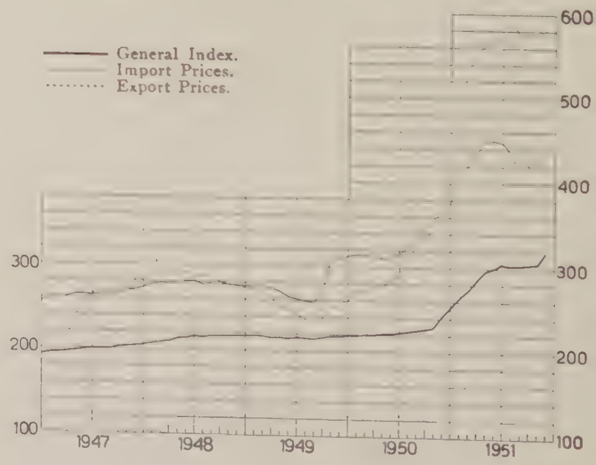
Foreign Trade. (Million kr.)

(Thin lines denote current 12-months' averages.)



Wholesale Price Index of the Board of Trade.

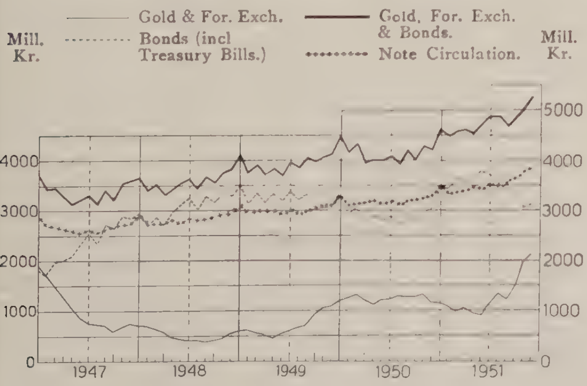
(1935 = 100.)



tween 4 and 5 per cent. higher in the period January to October 1951 than it had been in the same period a year ago. According to these statistics, production in the pulp and paper industries and in the ore mining and metal industries during the first ten months of last year was 9 and 6 per cent., respectively, above the corresponding figures a year ago. For the wood industry, production last year was about 4 per cent. higher and export sales of sawn and planed timber are likely to total 875,000 standards in 1951, as against 714,000 standards exported in 1950. On the other hand, the consumer industries, which chiefly depend on domestic demand, had in comparison a much smaller expansion of their markets. There was, it is true, a production increase of 4 per cent. in the textile industry, but much of this increase has no doubt been used to increase stocks. The leather, shoe, and foodstuff industries produced less in view of a weaker demand. Iron and steel production, in spite of a slight expansion in capacity, has not increased much, the chief reason being labour shortage. The iron industry which now bases about 60 per cent. of its production on scrap, may have to face at the beginning of 1952 a scrap shortage menacing full-scale production. The imports of scrap which previously used to come from Western Germany, have fallen to their lowest level, and an intensified scrap collection in this country has proved to be necessary.

The supply of raw materials to industry as a whole seems to have been satisfactory in general. In some cases where there have been shortages, *e. g.* of alloys for the production of high-grade steel and of sulphur for sulphite pulp, it has been possible to use less of these materials or to resort to substitutes. The use of copper has been prohibited for certain manufacturing purposes, and the shortage of sheet metal created difficulties to which a limited production was often the only answer.

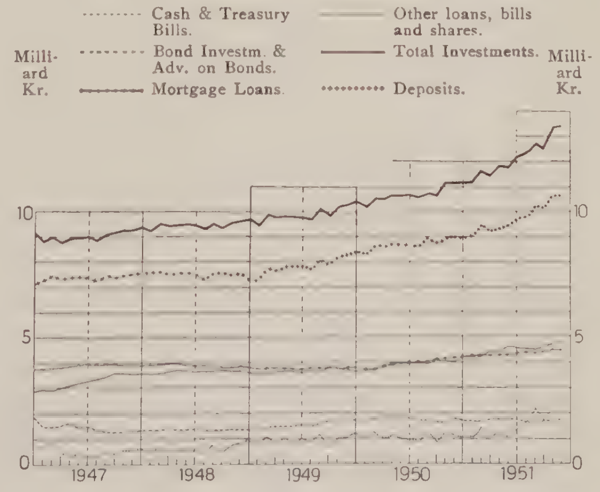
Position of the Riksbank. (Million kr.)



Fuel supplies were on the whole sufficient. By cutting down the amount of coke available for domestic use it has been possible to make the scanty coke supply meet the demands of industry. Under a trade agreement with Poland 3 million tons of coal have already been secured for 1952, but substantial amounts will have to be imported from elsewhere to meet the country's yearly demand of about 5 mill. tons. In spite of a lack of shipping space, no less than 900,000 tons or thereabouts were imported from the U. S. A. in 1951. As a result of the heavy rainfall during the last few weeks the water reservoirs have been replenished and there is no longer any immediate danger of electricity shortage during the critical winter period.

Domestic grain supplies have substantially deteriorated after an unsatisfactory harvest in which the grain yield was actually 18 per cent. below the average figure for the previous decade. In addition to bad weather the wheat crop suffered from an attack of stem rust which

Position of the Commercial Banks. (Milliard kr.)



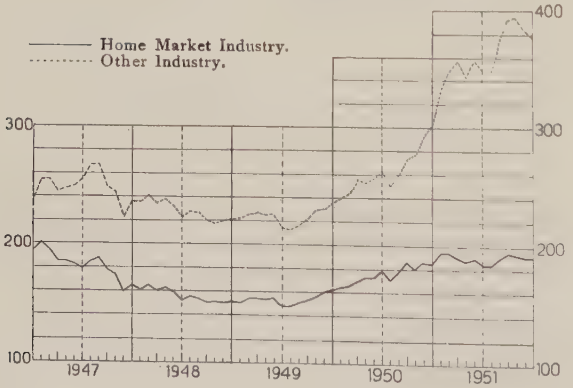
caused considerable damage. The yield of fodder grain, however, was somewhat better than usual. Foot and mouth disease has of late been spreading dangerously in southern Sweden and thousands of cattle have had to be slaughtered.

The supply of labour seems to have improved somewhat in certain fields in the autumn. There has been less demand for labour in commerce, and labour available for woodcutting is reported to be somewhat more plentiful than it was a year ago. Also, labour from the building and other trades is known to have gone over to woodcutting. In building, however, there has been an acute shortage of skilled workers such as masons, and the building programme in consequence has suffered serious setbacks.

Investments have been to all appearance substantially above the earlier level. The fact is that Government authorization is required only for about 30 per cent. of all private and municipal investment activity. The 12 per cent. investment tax this year may well put a brake also on investments in stocks and machinery which evidently were unusually large in 1951. The budget drawn up for building activities in 1952 allots a mere 202 million kronor to industry, *i. e.* the same amount as last year, while required building licences are assessed at 925 million kr. Total building activity for 1952 has been fixed at the same amount as last year, 2,860 million kronor, of which about 1,500 million will be allocated for housing, *i. e.* an expected 39,500 dwellings as against 41,000 dwellings in 1951.

At the end of 1951 consumers were more cautious buyers. The turnover reported from various retail trades points to a clear decrease in a number of branches. The partly smaller turnover is accounted for in some measure by rush purchases made in earlier days out of fear of price increases.

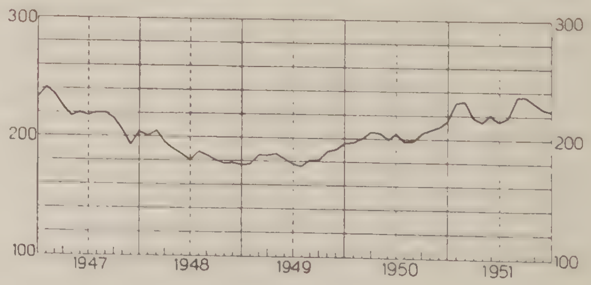
Industrial Share Indices.



Current collective bargaining involving about one million members of the Confederation of Swedish Trade Unions and nearly 300,000 members of the parent organization of salaried employees has not yet reached a point where this year's wage trends can be assessed. Moreover, collective bargaining has to face the problems presented by the existing disequilibrium in the wage structure. Favourable export prices for the wood-processing industries have no doubt encouraged the belief that there is a wide margin for wage increases. It is, however, obvious even now that these favourable trends will hardly show the same stability in the future. Competition on the world markets seems to be stiffening more and more and demand is expected to diminish. That section of the industry which supplies mainly the home market works on a narrow margin and its gains are probably little more than just a compensation for the rise in costs it has suffered following last year's wage increases.

As has been pointed out in greater detail in another article in this issue, Sweden's foreign trade was favoured in 1951 by a substantial improvement in the terms of trade. While export prices in November were 41 per cent. above the December 1950 figure, import prices rose by a mere 13 per cent. This means that exporters earned the country a 62 per cent. increase in terms of money while the amount of commodities actually exported showed but an insig-

Bank Share Index.



nificant increase. There was, it is true, a 55 per cent. increase in the cost of imports, but it must be remembered that they involved an increase in volume of about 30 per cent.

The first eleven months of 1951 show an import surplus of 271 million kronor, compared with 417 million the previous year.

	Imports	Exports	Export surplus (+) or Import surplus (—)
	Million kronor		
Jan.—Nov. 1939 . . .	2 231	1 724	— 507
» » 1945 . . .	928	1 524	+ 596
» » 1946 . . .	3 039	2 292	— 747
» » 1947 . . .	4 785	2 868	—1 917
» » 1948 . . .	4 432	3 534	— 898
» » 1949 . . .	3 894	3 737	— 157
» » 1950 . . .	5 502	5 085	— 417
» » 1951 . . .	8 518	8 247	— 271

The table below, covering the period January to October 1951, illustrates the increase in volume and value of exports of four principal categories of goods which constitute about 60 per cent. of the value of all Swedish exports.

Exports, January—October 1951

		Volume	Increase (+) or Decrease (—) compared with 1950, %	Value million kr.	Increase (+) compared with 1950, %
Iron Ore . . .	1 000 tons	12 751	+ 18	436.8	+ 30
Wood Products	1 000 m^8	3 499	+ 14	726.6	+ 74
Paper Pulp . .	1 000 tons	1 653	— 1	2 053.3	+151
Paper & Board	1 000 tons	618	+ 3	907.2	+116

The considerable price increases in wood products are clearly reflected in the figures showing the value of exports to our principal trade partners abroad. Exports to Great Britain during the first ten months of 1951 were thus more than twice as high as during the same period in 1950, the value of exported forest products having increased from 434 to 1,114 million kronor. Imports from Great Britain were, however, maintained at so high a level that Sweden's export surplus stayed at 121 million kronor. On the other hand, as shown in the table below, the country's foreign trade with Western Germany and the United States was less balanced and resulted in an import surplus of 272 and 299 million kronor, respectively.

Foreign Trade with the Most Important Countries, January—Oct. 1950 and 1951

Million kronor

	Imports		Exports		Trade Balance	
	1950	1951	1950	1951	1950	1951
Great Britain . . .	980	1 264	636	1 385	—344	+121
Western Germany .	497	987	596	715	+ 99	—272
United States . . .	435	721	257	422	—178	—299
France	304	414	191	403	—113	— 11
Netherlands	224	360	254	409	+ 30	+ 49
Belgium	188	445	164	304	— 24	—141
Norway	143	236	415	431	+272	+195
Poland	165	338	135	220	+ 30	—118
Denmark	159	190	267	333	+108	+143
Brazil	162	238	184	267	+ 22	+ 29
Argentina	138	129	79	312	— 59	+183
Italy	133	218	93	209	— 40	— 9

Export and import figures so far available give the following idea as to the trend of the foreign trade balance in 1951:

	1950	1951 (estimates)
Imports of goods, c. i. f. . . .	6 100	9 400
Exports of goods, f. o. b. . . .	5 710	9 250
Balance of trade	—390	—150
Shipping, net	600	950
Other services, etc., net	— 20	— 90
Balance of current account	+190	+710

The gold and foreign exchange holdings of the Riksbank, not deducting debts, were approximately 2,250 million kronor at the end of November 1951, compared with about 1,500 million kronor a year ago and 1,550 million at the end of the first six months of 1951. This strong expansion of the foreign exchange holdings, nearly 750 million kronor, is no doubt chiefly accounted for by payments for visible and invisible exports. An additional reason were transfers of capital from abroad, which seem to have been caused, in some cases at least, by a fear of devaluation in other countries. Following these transfers, but also due to a certain reorganization of the booking system for documentary credits, the net liabilities of the commercial banks to their foreign creditors have increased to an amount which is between 300 and 400 million kronor above the level obtained two years ago. The following table gives a summary of the foreign payments position of the Swedish banks.

Foreign Payments Position of the Riksbank and the Commercial Banks

Million kronor

	Dec. 30, 1950		June 30, 1951		Sept. 29. 1951		Dec. 15 1951	
Riksbank								
Gold		466		666		664		785
Dollars	493	920	377	886	347	955	.	1 506
Sterling	212		308		380		.	
Other foreign exch.	215		201		228		.	
Total, gross		1 386		1 552		1 619		2 291
Net claims on intern. institutions[1]		—		—		98		98
Foreign debt, net .		−232		−410		−128		—
Total, net		1 154		1 142		1 589		2 389
Commercial Banks								
Liabilities, net . .		−453		−577		−516		[2]−642
Net assets, total		701		565		1 073		[2]1 747

[1] International Monetary Fund and International Bank for Reconstruction & Development.

[2] For the commercial banks at Nov. 30, 1951.

The Swedish claim on the European Payments Union had advanced to 535 mill. kr. by December 15th, 1951.

Riksbank holdings of bonds and treasury bills dropped by 590 million kronor from 3,718 to 3,128 million kronor during the period June to November. This includes, however, 240 million kronor representing prize equalization fees disposed by the National Debt Office for repurchases of bonds. The Riksbank during that period placed about 325 million kronor worth of new money on the market, the chief reason for this being the fact that Riksbank payments for the purchase of foreign currencies surpassed the amount the Riksbank drew from the market through the sale of bonds.

There is an extraordinarily large flow of money to the big credit institutions. The total current deposits in the commercial banks, the savings banks, the Post Office Savings Bank, and the agricultural credit banks, is now over 20,000 million kronor, the figures being at various periods as follows:

	1 000 million kr.	Annual increase, %
Sept. 1947	15.40	
» 1948	16.04	4.2
» 1949	17.25	7.5
» 1950	18.59	7.8
» 1951	20.43	9.9

The 10,000 million figure was passed by the commercial banks in November with regard to advances, deposits having passed that line a few months earlier. This accumulation of money in the banks is not only the natural result of the general abundance of money in the country but in particular it is the result of further additions to that abundance arising, firstly, from export and freight payments from abroad which often find their way into the deposit accounts, and, secondly, from direct transfers of capital from abroad which appear as liabilities of the banks to foreign banks and other creditors outside Sweden. These transfers kept a record high level in 1951 — in November about 980 million kronor as against less than 500 million in November of the years 1947 to 1950. In view of the risk that the money originating from abroad might soon be withdrawn, the banks kept an unusually high degree of liquid assets, and this liquidity was further increased by the credit restraint imposed by the Government. In November 1951 the assets in cash and treasury bills of the commercial banks totalled about 2,360 million kronor, or 22.6 per cent. of the deposits, and 2,890 million kronor or 27.7 per cent. if bonds are in-

Position of the Commercial Banks

	1950	1951				
Assets (in mill. kr.)	Nov.	July	Aug.	Sept.	Oct.	Nov.
Cash	548	743	841	569	954	823
Treasury bills . . .	569	921	1 331	1 167	1 458	1 535
Swedish bonds . . .	744	557	497	539	513	532
Advances in Sweden	8 980	9 713	9 645	9 882	9 978	10 063
Assets abroad . . .	270	337	361	380	324	337
Sundry accounts . .	706	634	604	716	649	645
Total	11 817	12 905	13 279	13 253	13 876	13 935
Liabilities (in mill. kr.)						
Deposits in Sweden	8 826	9 631	10 113	9 930	10 453	10 430
Liabilities abroad . .	761	892	859	896	930	979
Share capital and reserve funds . . .	1 010	1 044	1 045	1 045	1 078	1 078
Sundry accounts . .	1 220	1 338	1 262	1 382	1 415	1 448
Total	11 817	12 905	13 279	13 253	13 876	13 935

cluded. The last peak in liquidity occurred in 1945 when advances were drastically held down by the Government's war economy measures prevailing at that time. In November of that year, cash and treasury bills of the banks amounted to roughly 1,440 million kronor or about 21.5 per cent. of the deposits.

The Stock Market. During the last summer months and in the autumn the Stock Exchange showed a repeated tendency to boom, and this trend continued until the first week in October when prices reached their highest level. It was then that many record levels were reached for the year, particularly in the wood-processing industries which had been attracting keen interest also before. The chief reason underlying the rise in prices was fear of continued inflation. Also, the announcement of the formation of the new coalition government seems to have given rise to fresh fears of further price increases which, in turn, increased the uneasiness among wage and salary earners. Another reason for the rise in prices was the scarcity of investment material coupled with a lively interest in buying.

The tendency slackened considerably and prices dropped decidedly during the second week of October. Uneasiness was caused by reports of incipient difficulties in various branches of industry, particularly in the textile industry which seemed to be affected by signs of a recession. The downward trend was further accentuated by such things as general economic difficulties in important foreign countries, the slump on the London Exchange, and the Anglo-Egyptian crisis. The turnover, which had reached high levels previously, dropped considerably. When official statements foreboded a tightening of economic policy, and when certain suggestions were made that export fees might be imposed on all exports and that a retroactive excess profits tax would be introduced, the situation deteriorated further in November. A certain stabilization of prices gradually took shape in mid-December, and prices partly recovered, while the turnover continued to be small.

From September 15 to December 15, 1951, prices dropped by 1.4 per cent. for the home market industry, 3.5 per cent. for other industries, and 5.2 per cent. for banks. Dividends in per cent. of market prices are indicated below.

	1951				
	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15
5 wood-processing companies	3.2	3.1	3.0	3.1	3.2
2 combined wood and iron industries	3.2	3.1	3.0	3.1	3.2
5 exporting engineering companies	4.5	4.2	4.2	4.4	4.4
4 big banks	4.1	4.1	4.2	4.2	4.2

The following new issues and bonus issues were made by major companies during the period under review:

New Issues

AB Svenska Handelsbanken	1 share for 5 old ones, at	150 %,	22.5 mill. kr.
AB Plåtmanufaktur	1 » » 3 » » »	108 %,	2.5 » »
AB Wilh. Becker	3 shares1) » 10 » » »	160 %,	1.980 » »

---

1) In connection with purchase of shares in another company.

Bonus Issues

Rederi AB Höganäs	1 share for 3 old ones,	1 275 mill. kr.
Forss AB, Köpmanholmen	1 » » 2 » »	1.8 » »
Gefle Manufaktur AB	1 » » 1 » one,	1.2 » »

In addition, shares in Wikmanshytte Bruks AB and in Wirsbo AB have been placed on the market. The shares in the first-mentioned company to the total nominal value of 9 million kronor were offered for sale at 120 % by Stockholms Enskilda Bank AB, the holders of ordinary shares in that bank having been given priority to purchase one share for each five shares held in the bank. In the second company whose total share capital amounts to a nominal value of 4.5 million kronor, 10,000 shares to a nominal value of one million kronor were sold at 120 % by certain banks and stockbrokers.

The Bond Market. After the passage of the law authorizing the control of interest rates and after the Government's refusal to accept a policy of flexible interest rates, the market stabilized itself at the earlier rate of $3^1/_2$ % for gilt-edged bonds. In this situation the small conversion risks presented by 3 % bonds made them a tempting subject for long-term investment and their prices are consequently varying between 94 and 95 per cent., which corresponds to a yield between 3.16 and 3.20 per cent. During the last quarter the market was on the whole rather dull, with insignificant changes in prices and a weak turnover. New issues, however, increased somewhat from what had earlier been a low level.

New Issues during Fourth Quarter of 1951

	Rate of Interest %	Amount of Issue, mill. kr.	Price of Issue %
City of Stockholm	$3^{1}/_{2}$	75 1)	$100^{1}/_{4}$
AB Gotlands Kalkverk	$3^{1}/_{2}$	1	100
AB Skandinaviska Elverk, Reg. certificates	4	10	100
AB Wilh. Becker, Reg. certificates	4	3.5	100
Gulsele AB	$3^{1}/_{2}$	20	100
Husqvarna Vapenfabriks AB, Reg. certificates	4	8	100
AB Bofors, Reg. certificates . .	4	20	100

---

1) Of which 67 mill. kr. offered in the market.

Notice of redemption, effective June 1, 1952, has been given for the 1938 $3^{1}/_{4}$ % loan of Munksjö AB, without option to convert.

The 20-year 3 % registered certificates issued by the Co-operative Union ranging from a minimum of 40 million kronor to a maximum of 100 million constitute an interesting novelty, in that subscribers retaining the certificates until maturity are guaranteed a compensation up to 50 per cent. of the nominal value for any deterioration in the value of money during the life of the loan. The loan has been designed particularly for institutional buyers such as trust funds, foundations, and trade unions. It has to all appearance met with lively interest.

The bond market has been undergoing a patent change in structure during the past five years. While the share of the State in outstanding long-term loans has decreased, the bond debts of other borrowers have considerably increased.

Bonds in Circulation, September 1946 and 1951

	Sept. 30, 1946		Sept. 30, 1951	
	mill. kr.	%	mill. kr.	%
Swedish Government .	8 213	68.9	6 832	51.8
Mortgage Banks . . .	2 569	21.5	3 775	28.7
Municipalities	545	4.6	1 176	8.9
Industr. & other firms	595	5.0	1 396	10.6
	11 922	100.0	13 179	100.0

It is a well-known fact that the decrease in the bond loans of the State is not the consequence of any shrinkage in the national debt. On the contrary, in the period from mid-1946 to end-1951 the national debt increased from approximately 11,200 to 12,800 million kronor. In reality, that change has been caused by the fact that the national debt is now composed to a much larger proportion of short-term debts, premium bonds, treasury bonds, and loans from government bodies. The bond debts of borrowers other than the State rose by more than 70 per cent., from approximately 3,710 million kronor in 1946 to 6,350 million in 1951. This increase must be attributed not only to expanded activities on the part of the borrowers but also to the deterioration in the value of money. Industrial companies have found long-term loans to be more favourable than an increase of share capital against which taxation and other factors have militated. Registered certificates have recently come into the foreground in this connection, firstly because this form of loan enables the companies to retain their unencumbered mortgages as a reserve for possible loans later on, and secondly because these loans have a wider market now that the funds of the insurance companies can be placed more freely.

On the short-term market interest yields have undergone no significant changes.

Interest Yield on Short-Term Loans

	Oct. 31, 1948	June 15, 1950	Dec. 15, 1950	Mar. 15, 1951	June 15, 1951	Sept. 15, 1951	Dec. 15, 1951
Shortdated bonds:				Per cent.			
1 year . . .	2.60	1.65	3.10	2.50	2.80	2.50	2.50
$2^{1}/_{2}$ years . .	2.80	2.50	3.25	2.80	2.90	2.70	2.50
Longer periods	3.15	2.50– –2.55	3.35	3.10	3.25	2.90	2.90
Treasury bills:							
Not more than 3 months . .	1.5	1.0	2.0	2.0	1.9	1.8	2.0
Day-to-day loans:							
1 day's notice	2.0	1.5	2.5	2.5	2.5	2.5	2.5
10 days' »	2.5	—	—	—	—	—	—

Some Statistical Data Concerning Sweden's Economic Position.

I. The Riksbank. (Amounts in million kr.)

Assets										Liabilities											
Gold and Foreign Exchange Reserves						Bonds and Treasury Bills		Domestic Bills		Note Circulation		Foreign Debt		Deposits at Sight							
Gold [1]		Foreign Exchange [2]		Total										State		Commercial Banks		Other		Total	
1 332		834		2 166		106		13		1 061		84		418		428		3		849	
1 371		712		2 083		1 544		49		2 877		174		706		84		85		875	
379		510		889		2 747		38		2 895		165		631		197		72		899	
290		411		701		3 317		65		3 113		96		679		358		101		1 138	
362		954		1 316		3 184		26		3 287		126		467		361		79		907	
466		920		1 386		3 443		21		3 513		232		511		312		44		867	
1950	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*
362	484	958	871	1 320	1 355	2 794	3 425	26	21	3 111	3 336	83	282	479	568	185	337	79	51	743	956
361	560	983	779	1 344	1 339	2 909	3 618	26	21	3 133	3 363	99	368	470	465	271	479	84	43	825	987
359	588	959	923	1 318	1 511	2 650	3 556	48	21	3 161	3 355	134	463	409	731	39	263	83	26	531	1 020
366	640	874	741	1 240	1 381	2 898	3 596	50	21	3 206	3 458	140	431	438	456	102	352	81	53	621	861
370	668	968	761	1 338	1 429	2 789	3 778	50	22	3 092	3 407	131	519	442	688	224	351	79	71	745	1 110
369	667	948	886	1 317	1 553	2 833	3 718	17	23	3 178	3 530	96	410	533	605	75	476	72	54	680	1 135
368	666	964	981	1 332	1 647	2 675	3 526	21	39	3 105	3 482	59	298	432	636	109	438	74	90	615	1 164
367	665	958	822	1 325	1 487	2 936	3 454	20	43	3 163	3 577	70	264	330	459	379	551	79	72	788	1 082
448	664	1 085	955	1 533	1 619	2 745	3 351	21	42	3 197	3 636	268	128	394	822	131	288	66	55	591	1 165
468	692	1 084	1 281	1 552	1 973	2 957	3 054	22	25	3 250	3 755	231	—	394	529	342	625	67	48	803	1 202
467	704	940	1 422	1 407	2 126	3 046	3 128	22	26	3 285	3 823	255	—	404	858	263	509	63	61	730	1 428
466	785	920	1 594	1 386	2 379	3 443	2 821	21	21	3 513	4 090	232	—	511	528	312	522	44	60	867	1 110

rket value. — [2] Gross claims on foreign countries.

II. Commercial Banks. (Amounts in million kr.)

Cash		Swedish Bonds [1]		Advances [2]						Deposits [2]		Surplus of Advances		Net Claims on Foreign Countries		Distribution of Loans by Forms of securities (in %)							
				Domestic Bills		Thereof Redisc.		Total Advances								Mortgages		Personal Guarantee		Shares		Bonds, merchandise, &c	
																%		%		%		%	
601		190		1 163		0		4 254		4 041		213		−40		58.4		13.8		15.3		12.6	
382		991		1 354		8		7 242		6 939		303		−312		59.2		14.8		7.3		18.7	
499		533		1 745		—		7 937		7 290		647		−293		60.0		19.2		7.3		13.5	
652		717		1 746		0		7 830		7 490		340		−300		59.0		19.2		7.7		14.1	
686		1 271		1 820		—		7 925		8 258		−283		−281		58.5		20.2		7.0		14.3	
681		1 107		2 126		—		9 065		8 779		286		−453		58.8		20.9		6.6		13.7	
1950	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*
431	640	1 381	1 060	1 837	2 157	—	—	8 030	9 214	8 182	8 890	−152	324	−286	−503	58.4	58.5	20.6	21.2	7.0	6.5	14.0	13.8
526	772	1 709	1 330	1 852	2 203	—	—	8 030	9 238	8 563	9 268	−533	−30	−318	−547	58.6	58.7	20.4	21.1	6.6	6.4	13.9	13.8
287	552	1 594	1 181	1 909	2 334	—	—	8 238	9 559	8 448	9 070	−210	489	−327	−659	58.4	58.4	20.6	21.0	7.0	6.3	14.0	14.3
339	663	1 644	1 281	1 928	2 423	—	—	8 266	9 652	8 536	9 226	−270	426	−323	−748	58.5	58.2	20.9	21.2	7.0	6.3	13.6	14.3
488	641	1 407	1 136	1 966	2 505	—	—	8 332	9 711	8 527	9 251	−195	460	−310	−621	59.0	58.0	20.1	21.4	6.8	6.1	14.1	14.5
668	806	1 440	1 238	1 995	2 527	—	—	8 422	9 725	8 529	9 535	−107	190	−248	−578	58.9	58.7	20.5	20.8	6.9	6.1	13.7	14.4
359	743	1 312	1 478	1 981	2 536	0	—	8 530	9 713	8 449	9 631	81	82	−299	−556	58.4	59.0	21.3	19.9	6.6	6.1	13.7	15.0
629	841	1 411	1 828	1 964	2 527	—	—	8 557	9 645	8 821	10113	−264	−468	−358	−498	58.7	59.3	21.0	20.0	6.6	6.1	13.7	14.6
417	569	1 148	1 706	2 023	2 580	—	—	8 889	9 882	8 554	9 930	335	−48	−402	−516	57.8	58.5	21.7	20.1	6.4	6.1	14.1	15.3
642	954	1 307	1 971	2 031	2 600	—	—	8 891	9 978	8 804	10453	87	−475	−487	−606	58.2	58.2	21.7	20.5	6.4	6.1	13.7	15.2
548	823	1 313	2 067	2 065	2 642	—	—	8 980	10063	8 826	10430	154	−367	−491	−642	58.5	57.7	20.9	20.7	6.5	6.2	14.1	15.4
681		1 107		2 126		—		9 065		8 779		286		−453		58.8		20.9		6.6		13.7	

luding Treasury Bills. — [2] Within the country.

III. Other Credit Institutions. Stock Exchange.

Year or Month	Savings Banks						Deposits at the Post Office Savings Bank[1] Million kr.		Bank Clearing at the Riksbank Million kr.		Turnover of the Postal Cheque Service Million kr.		Yields on Bonds[2]				Turnover at the Stockholm Stock Exchange[3]				Share inde		
	Deposits[1] Million kr.		Advances[1] Million kr.		Bonds[1] Million kr.								Govt. Loans %		Industrial Loans %		Bonds 1 000 kr.		Shares 1 000 kr.		Home Industries		Ot Indu
1938	3 685		3 069		829		618		31 380		24 986		2.32		2.92		243		931		161		1
1946	6 034		4 660		1 513		1 589		72 360		93 656		3.03		2.98		1 225		663		194		2
1947	6 356		5 402		1 149		1 722		82 832		119 657		3.05		3.10		2 283		786		181		2
1948	6 751		5 953		953		1 923		83 769		142 062		3.09		3.33		1 266		462		156		2
1949	7 060		6 481		911		2 083		88 548		157 383		3.04		3.02		429		446		154		2
1950	7 437		6 994		879		2 143		109 313		167 415		3.16		3.10		354		759		175		2
	1950	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*
Jan.	·	·	·	·	·	·	2 105	2 154	8 265	11932	14 108	16 941	3.03	3.33	3.00	3.53	454	555	656	1101	164	194	239
Febr.	·	·	·	·	·	·	2 130	2 166	6 716	9 789	12 255	14 185	3.05	3.31	2.97	3.37	328	226	940	1274	165	193	244
March	7 430	7 720	6 623	7 092	906	855	2 142	2 168	8 500	11373	13 927	17 444	3.03	3.24	2.97	3.33	388	817	966	890	170	190	256
April	·	·	·	·	·	·	2 148	2 173	6 833	11174	10 255	13 065	3.05	3.25	2.97	3.36	330	2 755	663	723	172	187	253
May	·	·	·	·	·	·	2 138	2 170	9 004	12785	17 684	21 357	3.05	3.29	2.97	3.52	456	1 674	511	859	173	189	256
June	7 466	7 719	6 769	7 158	911	820	2 137	2 187	8 321	11971	11 293	14 271	3.05	3.29	2.97	3.55	325	552	924	594	179	185	264
July	·	·	·	·	·	·	2 146	2 215	8 502	12534	14 764	18 473	3.05	3.28	3.02	3.54	414	154	650	585	170	184	250
Aug.	·	·	·	·	·	·	2 156	2 239	8 489	11510	12 884	15 529	3.20	3.27	3.20	3.39	160	166	526	799	176	190	259
Sept.	7 489	7 806	6 924	7 251	897	813	2 149	2 250	10018	12287	15 811	17 724	3.18	3.23	3.19	3.34	253	223	705	652	180	194	274
Oct.	·		·		·		2 149	2 272	10417	13557	12 568	15 252	3.27	3.23	3.20	3.31	386	201	640	782	180	193	277
Nov.	·		·		·		2 139	2 283	12415	14956	18 155	22 026	3.28	3.23	3.27	3.27	365	184	1158	525	186	192	293
Dec.	7 436		6 994		879		2 143		11833		13 711		3.35	3.23	3.45	3.31	417	239	774	661	185	192	301

[1] At the end of each year or month. — [2] Calculated on market prices at middle of months. The yearly figures represent averages of the mo figures. — [3] Averages per Stock Exchange business day.

IV. Other Statistical Data.

Year or Month	National Debt[1]				Foreign Trade						Production Index[2] 1935 = 100		Unemployment in the Trade Unions[3] %		Whole Sale Price Index (1935 = 100)[3]						Cost of Living Index[3] 1935=100		Waggon Kilom of Loa Truck
	Total Million kr.		Thereof funded Million kr.		Imports Million kr.		Exports Million kr.		Export (+) or Import (—) Surplus Million kr						Import Goods		Export Goods		All Goods				
1938	2 566		2 443		2 082		1 843		— 239		123		10.9		111		120		111		106		44
1946	11 384		9 336		3 386		2 547		— 839		167		3.2		251		211		186		151		112
1947	11 287		8 931		5 220		3 240		—1 980		172		2.8		264		254		199		156		108
1948	11 598		8 944		4 945		3 979		— 966		183		2.8		278		285		214		163		108
1949	12 055		8 714		4 333		4 250		— 83		191		2.7		278		253		216		166		110
1950	12 464		8 949		6 103		5 710		— 389		199		2.2		332		314		227		168		120
	1950	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*	*1951*	*1950*
Jan.	11 759	12 259	8 765	8 974	403	692	431	516	+ 28	—176	193	203	4.4	2.7	315	405	269	461	219	266	·	·	102.0
Febr.	12 414	12 734	8 782	8 973	367	662	328	451	— 39	—211	198	208	4.0	2.4	314	423	273	533	220	275	·	·	107.6
March	12 016	12 329	8 851	8 972	495	681	426	545	— 69	—136	206	217	3.0	2.9	312	437	276	550	220	287	167	188	125.4
April	12 247	12 422	8 336	8 972	472	788	398	631	— 74	—157	213	216	2.1	1.7	311	450	279	567	221	297	·	·	108.2
May	11 936	12 409	8 848	8 989	491	846	458	785	— 33	— 61	206	215	1.4	1.1	312	450	284	571	221	302	·	·	135.4
June	12 073	12 421	8 879	9 000	504	886	492	1046	— 12	+ 160	202	212	1.5	1.1	314	448	294	566	223	305	167	195	113.7
July	11 740	12 199	8 871	8 731	499	773	410	743	— 89	— 30	137	144	1.5	1.4	322	430	308	592	224	305	·	·	105.9
Aug.	12 246	12 685	8 883	8 733	509	839	497	756	— 12	— 83	194	197	1.3	1.1	333	427	326	575	225	304	·	·	123.6
Sept.	11 756	12 567	8 864	8 730	541	756	515	915	— 26	+159	202	213	1.1		347	422	337	575	228	304	168	200	130.6
Oct.	12 092	12 628	8 861	8 689	583	820	551	942	— 32	+122	212	215	1.2		358	429	348	577	230	306	·		135.4
Nov.	12 222	12 835	8 922	8 686	636	776	579	920	— 57	+144	214		1.5		366	430	355	582	244	319	·		132.7
Dec.	12 464		8 949		599		625		+ 26		210		3.6		379		411		253		171		122.1

[1] At the end of each year or month. — [2] The yearly figures up to and including 1948 according to the Board of Trade, the other acco to the Federation of Swedish Industries. — [3] The yearly figures represent averages of the monthly figures. — [4] Million kilometres per m on State Railways.

Kungl. Boktr. S
51346

SKANDINAVISKA BANKEN

AKTIEBOLAG

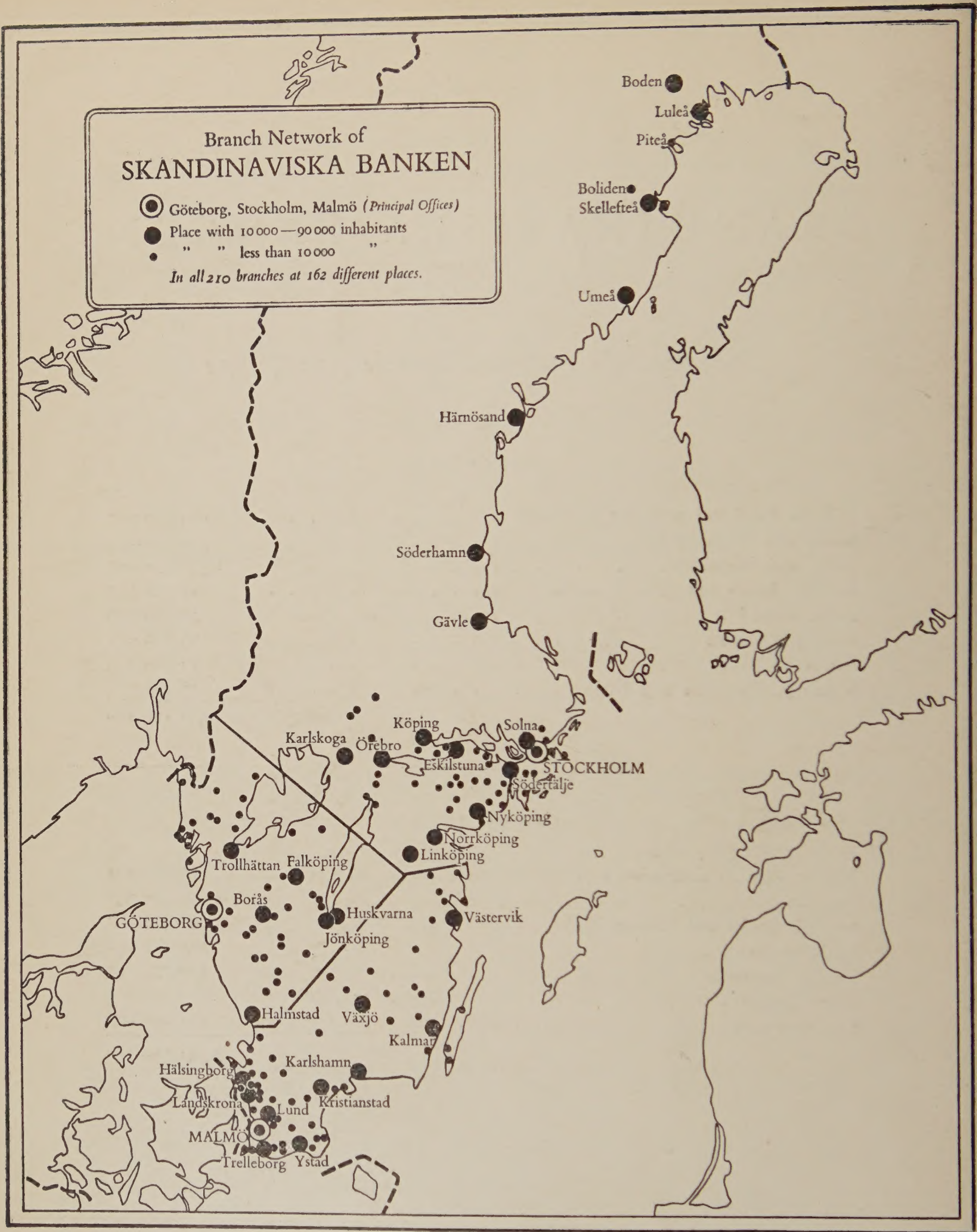
Statement of Condition November, 30th, 1951

ASSETS

Cash in hand and with the Riksbank	265.949.527
Bonds and Treasury Bills	502.480.134
Loans and Discounts	2.536.519.007
Swedish Banks and Savings Banks	25.482.523
Banks abroad	58.830.639
Sundry Accounts	63.666.071
Shares	61.760.425
Buildings, Furniture and Fittings	26.440.914
	Kr. 3.541.129.240

LIABILITIES

Bills at sight in circulation (»postremiss» bills)		27.889.041
Deposits		2.753.540.338
Swedish Banks and Savings Banks		48.429.307
Banks abroad		275.495.961
Sundry Accounts		190.774.593
Share Capital	114.850.000	
Reserve Funds	130.150.000	245.000.000
		Kr. 3.541.129.240



GENERALSTABENS LITOGRAFISKA ANSTALT